and benchmarking both internally and externally, an assessment and determination of satisfaction has been possible.

Materials and Methods: The standard AIR staffing model (from 2001) which is routinely utilised in Australia states a requirement of 4.5 FTE on a Linear Accelerator treating around 40 patients per day. Following a workflow redesign, ROV implemented a staffing model of 3.0FTE for a similar workload on its Linear Accelerator fleet. After this change, patient satisfaction with the service was assessed by obtaining patient satisfaction scores using an iPad device connected to cloud based software using a net promoter score methodology. The recorded scores of satisfaction were compared to both internal and external controls and demonstrated that changes to the staffing model had no impact on the quality of service provided.

Results: After 13 months of data collection involving 1688 patients across 5 sites, the NPS data analysis demonstrates a consistent score of at least 70% (noting a NPS score of >40% is considered very good).

Conclusions: The data demonstrates that the new staffing model adopted by ROV maintains excellent levels of service as evidenced by patient satisfaction. ROV continues to monitor patient satisfaction on an ongoing basis to ensure the service provided continues to meet or exceed expectations. In the event that a respondent is dissatisfied by a score on any metric of less than 60%, contact with the respondent is made immediately as the cloud based system provides real time notification to a manager.

EP-1676

Spanish validation of Charlson index applied to prostate cancer

F. Casas Duran[1], F. Ferrer[2]
[1]*Hospital Clinic i Provincial, Oncology Division of Radiophysics, Barcelona, Spain*
[2]*Hospital Duran i Reynals (ICO), Oncology Division of Radiophysics, Barcelona, Spain*

Purpose/Objective: Comorbidity assessment is essential to triage of care for men with prostate cancer. Specially in these with an expectative of life less of ten yars.. We tried to make a Spanish validation of revised Charlson index (RCI) applied to prostate cancer.

Materials and Methods: A group of 619 consecutive cases of prostate cancer diagnosed between 1994 to 2007 weresend for clinical assessment at radiation oncology department of hospital Clinic of Bacelona. A long the period of follow-up 69 patients deceased for prostate cancer and were excluded in this study inorder to determine the risks of mortality associated with comorbidities measured by the RCI. RCI was classified in three categories 0 to 2 , 3 to 4 and 5 and higher. For this purpose we used Kaplan-Meier method and Cox proportional hazards modeling .

Results: Finally 550 patients with prostate cancer were included, with median age of 70 years old (47-85), Mean follow-up time was 136.8 months, between 5,6 and 245,8 months. D'Amico risk classification distribution was for low, mediun and high risk 20.4%, 36,5% and 43,1% respectively. RCI distribution categories was as follows 61,5%, 21,8 and 16,7%. Survival analysis showed significant differences ($p<0.001$) between RCI groups at 5 and 10 years. Survival probability was 98,2 and 88,5% ; 95% and 79,6% ; and 52,2% and 8,9% respectively for each RCI category.

Conclusions: RCI allowed for more accurate identification of men at highest risk for other cause mortality. Our results are in concordance with original RCI .This revised index may be used to aid medical decision making for men with prostate cancer.

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Evolution of acute toxicity in the short course of radiotherapy in rectal cancer

E. Jimenez-Jimenez[1], P. Mateos[2], J. Pardo[1], J. Font[2], S. Montemuiño[3], I. Ortiz[3], M. Vidal[3], I. Alastuey[1], S. Sabater[4]
[1]*Hospital Universitari Son Espases, Radiation Oncology Department. Palma Health Research Institue (IdisPa), Palma de Mallorca, Spain*
[2]*Hospital Universitari Son Espases, Medical Physics Department, Palma de Mallorca, Spain*
[3]*Hospital Universitari Son Espases, Radiation Oncology, Palma de Mallorca, Spain*
[4]*Complejo Hospitalario Universitario de Albacete, Radiation Oncology Department. Palma Health Research Institue (IdisPa), Albacete, Spain*

Purpose/Objective: Short-course radiotherapy (SCRT) followed by immediate surgery at 1 week is an option treatment in rectal cancer, and it is generally accepted that SCRT is associated with less early toxicity than conventionally fractionated chemoradiotherapy. Currently, the SCRT and delayed surgery (i.e. 4–8 weeks) after radiotherapy (RT) is being evaluated in order to improve results. It seems that longer surgery delays are associated with a better tumor response, but acute toxicity has not been evaluated accurately. Our aim was to evaluate the acute toxicity of patients treated with SCRT in the weeks before the surgery in our hospital.

Materials and Methods: 17 patients with localized rectal cancer staged T3-4N0/+ treated with 25 Gy in 5 consecutive fractions followed by surgery were analyzed. All patients received 3D conformal RT with a multileaf collimator (MLC) and were immobilized in the supine position. The CTV included the rectum, mesorectum, common and internal iliac vessels with a 1-cm margin, presacral space, posterior part of the internal obturator muscle and 1–2 cm of the bladder. Surgery was performed 1-3 weeks after the beginning of RT. Surgery was performed 1 week after RT in 6 patients, 2 weeks after RT in 9 patients, and after 3 weeks in 2 patients. Acute toxicity assessment was performed during routine follow-up examinations and toxicity grades were assessed with the RTOG scale. All data analyzed by Microsoft Office Excel 2007.

Results: Little toxicity was observed in the 6 patients in whom the surgery was performed 1 week after RT: asthenia (grade 1), proctitis (grade 1) and cystitis (grade 1-2). No other types of acute toxicity were observed. Patients in whom surgery was delayed 2-3 weeks after RT, acute toxicity get worse (≥ grade 2-3). (Figure 1)The most severe symptoms were asthenia, diarrhea and proctitis. Urinary incontinence was maintained equal. 2 patients that had surgery beyond 3 weeks from the end of RT required admission for symptom control. In all cases, surgery delay was due to surgical waiting list.

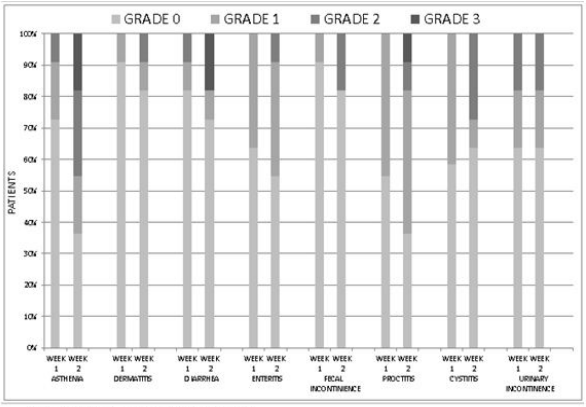

Figure 1: Worst acute grade toxicity

Conclusions: Our data suggest that SCRT followed by delayed surgery (1 week) is well tolerated. However, beyond the 2-3 week toxicity increases and may require medical treatment at the hospital. SCRT and delayed surgery (4-8 weeks after radiotherapy) may improve outcomes, but the acute toxicity of these patients should be carefully evaluated.

EP-1678

Practice Guidelines skin care advice for patients undergoing radical external beam megavoltage radiotherapy

R. Harris[1], C. Beardmore[1], A. Bolderston[2], S. James[3], H. Probst[4], C. Bennett[5], S. Bostock[6], C. Downs[7], S. Faithfull[8], S. Hoy[9], A. Scott[10], D. Tait[11], E. Trueman[12], M. Wells[13]

[1]The Society and College of Radiographers, Professional and Education department, London, United Kingdom
[2]British Columbia Cancer Agency, Provincial Professional Practice, Vancouver, Canada
[3]The Society and College of Radiographers, Professional and Education Department, London, United Kingdom
[4]Sheffield Hallam University, Faculty of Health and Wellbeing, Sheffield, United Kingdom
[5]Radiotherapy and Oncology programme, University of the West of England, Bristol, United Kingdom
[6]Gloucestershire Oncology Centre, Radiotherapy, Cheltenham, United Kingdom
[7]Northern Centre for Cancer Care, Radiotherapy, Newcastle upon Tyne, United Kingdom
[8]University of Surrey, School of Health Sciences, Guildford, United Kingdom
[9]The Royal Marsden NHS Foundation Trust, Head and Neck Unit, London, United Kingdom
[10]East & North Herts NHS Trust Northwood, Mount Vernon Cancer Centre, London, United Kingdom
[11]The Royal Marsden NHS Foundation Trust, Oncology, London, United Kingdom
[12]St James's Institute of Oncology, Radiotherapy, Leeds, United Kingdom
[13]University of Stirling, NMAHP Research Unit, Sterling, United Kingdom

Purpose/Objective: Skin reactions from external beam radiotherapy are one of the most common side-effects from treatment (1, 2), and may cause distress to some patients, and in certain cases may be a factor which can limit radiation dose and treatment schedules. Megavoltage linear accelerators with skin sparing capabilities have significantly reduced the severity of reactions from radiotherapy; however accelerated radiation dose schedules with concurrent chemotherapy, and the use of biological agents such as epidermal growth factor receptor (EGFR) inhibitors, have led to an increase in certain skin reactions (3). Significant skin reactions are also seen in patients receiving high doses to large fields, in patients where there are folds of skin (for example inframmary fold, groin, axilla) and patients receiving radiotherapy to the head and neck region (4, 5). Yet despite changes in radiotherapy practice and numerous published skin care guidelines (6, 7)) patient skin care appears to have changed little over the years, with no consensus amongst centres using different skin care regimens, product use and approaches.

Materials and Methods: A Guideline Development Group have reviewed the current evidence to assist radiographers, radiotherapy nurses, and the wider radiotherapy workforce, to give the optimal skin care advice to patients undergoing radical external beam megavoltage radiotherapy. Although it is unlikely that radiation reactions can be completely prevented, the current driver is to delay the onset and minimise the severity of a skin reaction, to reduce symptom related discomfort, and prevent further complications.

Results: The recommendation from the guidance document is to standardise skin care education of all staff caring for patients receiving radiotherapy by dissemination of the guidance using a variety of educational methods.

Conclusions: Standardise assessment tools across departments which are objective and consistent. Consider the evidence on current products and start new high quality trials to investigate interventions for dry or moist desquamation enabling a more consistent approach for patients receiving radiotherapy and inform radiotherapy skin care guidelines.

EP-1679

Nurse advice for carers of patients undergoing radiotherapy

E. Arroyo-Gil[1], F. Suriñach- Pérez[1], S. Barrullas[1], J. Cabezali-Novoa[1]

[1]Hospital de la Santa Creu i Sant Pau, Department of Radiotherapy, Barcelona, Spain

Purpose/Objective: Given that radiotherapy is usually an outpatient treatment, the nurse has to provide the patient and the carer the necessary information and support to resolve the process positively and to jointly elaborate a plan for cures adapted to the various situations, which the patient will be undergoing.

The carer is usually someone from the family, a neighbour or a friend without specific training, who will become key to the link between the patient and the nurse.

In this paper, we would like to measure the degree of satisfaction of the task of the carer during the treatment and also to receive feedback for the response they have received from the nurse.

To improve the healing of the patient.

- To detect early problems encountered related to the patient's illness.